

### **Comment 3: Judith Filips and Dale G Backer**

*Key Concerns: Public Outreach, Well Monitoring, and Safety*

- 3.1 It is a scandal that the Landsburg Mine proposed cleanup has dragged on for several decades without resolution and many of the interested parties have likely died or moved away.**

***Ecology's Response:***

Ecology recognizes that this cleanup process has taken a long time. The Landsburg Mine site is a complex site. Addressing such a site is very time-consuming. The cleanup regulations, while having a good deal of flexibility in approach, also have some very specific criteria to achieve adequate characterization and protective cleanups. These criteria, together with the issues that have been raised about the site by the various stakeholders have combined to make this cleanup a time consuming process. Ecology has made this site a priority and is working as quickly as the process will allow.

In addition, there are many steps involved in deciding what cleanup actions are appropriate, and how to implement the cleanup actions. Some of these include, defining the nature and extent of contamination, and evaluating how to address the contamination in a public process. The various factors, which influence cleanup schedules, include time, personnel constraints, and the process of developing technically sound approaches. Thus, the length of time necessary to address a significant cleanup site is often the result of many circumstances and conditions.

- 3.2 At minimum, the Department of Ecology should hold at least two public meetings in the Maple Valley area each year to update the community on the status of this project. The meetings should be well advertised at least two weeks in advance in a broad regional interest publication such as the Seattle Times or Seattle P-I, and interested parties who have previously submitted comments should also be notified by mail. These public meetings would be in addition to presentations to other interested groups.**

***Ecology's Response:***

The public involvement activities for this site reflect the high degree of interest of the community. The Model Toxics Control Act (MTCA) provides guidance for the public involvement process to ensure proper notification of public comment periods and public meetings. Ecology's public involvement communication strategy for the Landsburg Mine site reaches beyond the MTCA requirements to meet the needs of the community and stakeholders. See Summary of Public Involvement Actions section above for detailed information.

Ecology regularly updates the community through Fact Sheets, Site Register notices, Media Releases, Display Ads, Bulletin Board Fliers, stakeholder meetings, and Public Meetings.

Ecology wrote a Public Participation Plan in 1993 for this site that identifies key stages where public comment periods and public meetings will be held. This includes the Remedial Investigation/Feasibility Studies, legal agreements, and the Cleanup Action Plan.

Given the high level of interest in this cleanup process, Ecology will continue to hold public meetings or make available sessions where community members can speak directly to agency officials and potentially liable parties when necessary as the cleanup process continues.

**3.3 The potentially liable parties should be required to post a bond sufficient for all projected costs of a potential future site cleanup and remediation, and damage to any public or private wells or water sources. Protection of the Cedar River, the fish and wildlife it supports, and the considerable investment of the City of Seattle and King County in the health of the Cedar River basin should also be covered by such a bond.**

***Ecology's Response:***

Ecology agrees with the importance of financial assurances, which are a requirement under the Model Toxics Control Act (MTCA). However, this can only be achieved as part of the final Cleanup Action Plan. In order for this and other practical protective measures to be implemented, a formal legal agreement must be negotiated between Ecology and the Potentially Liable Parties (PLPs) in the form of a Consent Decree for the Cleanup Action Plan.

Ecology will continue to work hard to resolve such issues in the future.

**3.4 Monitoring of wells and groundwater has been and remains inadequate. Each public and private well in the vicinity of the Landsburg Mine and Rogers Seam should be monitored at various depths and sufficient frequency so as to ensure the absence of contaminants that would endanger the health of individuals, livestock wildlife, crops, or those who might come in contact with it.**

***Ecology's Response:***

Monitoring at Landsburg Mine has been adequate since the Agreed Order was entered into in 1993. The present monitoring well coverage has been and remains sufficient. Twelve monitoring wells are screened at various depths in the site (both shallow and up to 700 feet) and at the appropriate groundwater pathways throughout the site. These wells and water from the portal areas have been sampled periodically for the full suite of contaminants, and chemical analyses has not shown any groundwater contamination attributable to the wastes.

Sampling of 14 private wells (including the Clark Springs facility) was carried out early in the RI/FS in 1996. Prior to that, the Department of Health sampled 9 wells and the Clark

Springs gallery in 1990 (over 15 years after the coal mine had closed and the disposal of wastes occurred). Ecology finds that there are no technical grounds for such a statement, given lack of any detected contamination of a magnitude or type expected to derive from such wastes as seen from groundwater chemistry studies at this site.

- 3.5 Due to the largely unknown composition of many of the 4,500 barrels, and unknown quantities of other industrial contaminants dumped down the Landsburg Mine and Rogers Seam, all cleanup, capping, isolation, removal or other disposal of waste products on or likely emanating from this site should be held to the standards of hazardous waste treatment and disposal. The Model Toxics Control Act should not be waived on activities pursuant to resolution of these issues unless it can be adequately demonstrated to be in the public interest, particularly in regards to safety.**

***Ecology's Response:***

Under the Model Toxics Control Act (MTCA) Cleanup Regulation, the standards for cleanup levels of hazardous substances are mandated under state law based on toxicological and/or risk-based calculations or other considerations such as applicable state and federal laws (ARARS). Standards for dangerous waste transport, treatment and disposal are applicable for generators of dangerous waste, not for cleanup of contaminated media (soil, water) at a property. However, dangerous waste standards are automatically adhered to when activities at the site are relevant to this process. The same standards for disposal of dangerous waste are adhered to as a matter of procedure and in collaboration with or under the direction of the appropriate regulating agency, be it state or local government.

For more details on MTCA cleanup standards see WAC 173-340-700 to 760. This provides the background material needed to understand the cleanup standards adhered to under MTCA cleanup in order to protect human health and the environment. These standards for cleanup have always been the benchmark for monitoring and remediation activities for all formal cleanup sites, including Landsburg Mine, under the Toxics Cleanup Program.

- 3.6 No action should be taken that increases the distribution of contaminants from this site to other waters of the State of Washington, including, ultimately, Puget Sound, by way of effluent discharge to a County sewer line.**

***Ecology's Response:***

At present, Ecology believes there is greater risk to human health and the environment if no action is taken at this site. To eliminate or minimize this risk it is important to install infrastructure for the contingent groundwater treatment system.

If contaminated groundwater is detected at the site, the groundwater will be pumped out to prevent its release to the environment. This groundwater will then be pre-treated. It is important to have the infrastructure available to safely and reliably dispose of the pre-treated groundwater.

The length of time needed to get the appropriate permits or approvals to install the infrastructure could present problems with storing and disposal of the pumped water on-site. The most significant delay will be the procedures to obtain the various permits or approvals to construct infrastructure to house the treatment system, a reliable, robust, and cost-effective way to dispose of the pre-treated groundwater without discharging into the environment.

The purpose of the proposed interim action is to prevent any contaminants that may be present at the site in the future from migrating from the site. If the infrastructure is in place and any contaminated groundwater is detected emanating from the site, the PLPs can respond quickly by installing a treatment system that will pre-treat the identified contaminants to such a level that the groundwater may be safely piped to a POTW for final treatment prior to discharge to waters of the State. If the infrastructure is not installed now, the length of time required to obtain permits and approvals necessary to install the infrastructure could result in contaminants leaving the site.

For more information, see 2.4 above.

## **Comment 4: Greater Maple Valley Area Council**

### *Key Concerns: Public Safety*

- 4.1 At our November 7, 2005 meeting, Area Council Members listened to public concerns regarding the proposed plan, which includes design and build of an underground effluent discharge line for a contingent groundwater treatment system from an on-site pretreatment facility for the recently completed toxic substance monitoring well to an existing county owned sewer line located north of the site.**

**After considerable discussion, members of the Greater Maple Valley Area Council voted unanimously to request that the Washington Department of Ecology make no decision regarding the extension of this effluent discharge line until it has determined that contaminants are present and exceed Washington's water standards and until "in community" public meetings are held with all affected parties surrounding the site and King County officials.**

### *Ecology's Response:*

Ecology believes that in order to protect human health and the environment, we need to make decisions in order to create contingency plans and protective measures for this site. Regardless of the final remedial alternative chosen, the contingent groundwater treatment system will be an important element in the final cleanup of the site.

In order listen to the community and stakeholder concerns, Ecology extended the public comment period and held community public meetings. As a result, we modified the proposal to install the pipeline as a "dry" line. This line will only be physically connected to the sewer in the event that a threat to human health and the environment is determined to exist based on monitoring at the site.

However, no contamination has been found at the site that can be attributed to the wastes in the subsidence trench. Despite this, the Contingent Groundwater Treatment system is needed in order to safely and reliably dispose of pre-treated groundwater. Therefore, Ecology believes it is necessary to make decisions and plan for contingencies now even though we have not detected contamination.

Given the high level of interest in this cleanup process, Ecology will continue to hold public meetings or make available sessions where community members can speak directly to agency officials and potentially liable parties when necessary as the cleanup process continues.

## **Comment 5: Joan Burlingame (Ravensdale, Washington)**

### *Key Concerns: Water Withdrawal and Land Use*

**5.1 Removing Water from the Aquifer:** The toxic waste illegally placed in the ground near Landsburg impacts the water owned by the State of Washington of which I have a legal right to by state law. This water is potentially unavailable to me because of the actions of the potentially liable parties (PLP). There are many other water users in this area whose water supply is likely to be depleted because of contamination and the proposed water withdrawals that WA DOE is proposing as a "fix" to the illegal actions of the PLPs. In the last meeting I attended DOE staff said that up to 30 gallons a minute may be removed from the aquifer. Any remediation actions that do not address both the removal of toxins and the FULL replacement of any water taken out of the ground do not address the impact of the illegal actions of the PLP: the other negatively impacted landowners are not made "whole." There is no extra water in the aquifer. WA DOE has already allowed so many wells to go in that my well, that once was very strong, now goes completely dry about five times a year.

### ***Ecology's Response:***

Ecology recognizes that water is a valuable resource that must be managed accordingly. The water wells referred to are not in the same local aquifer, nor are they in direct hydraulic communication with the primary groundwater pathways at Landsburg Mine due to their distance from the site, their different hydrogeological setting, and presence of hydraulic boundaries.

The proposed contingency action, if initiated, is to pump out the mine portal wells located in the Rogers seam, a different geological unit or aquifer from that of the private wells. The contingency plan is to pump from portal wells that would primarily withdraw waters coming from the interior of the former mine, and intercept the path of contaminated water out of the portal area when it exits the interior of the mine.

The water well referred to in this area is distant from the former mine and not situated in a direct permeable flow pathway of water from the interior of the former mine. It is located approximately 4,000 feet west of the south portal wells and 7,500 feet west of the north portal wells, and across the strike of the sedimentary beds that underlie the area. The portal wells at Landsburg Mine are situated within the Rogers coal seam, in a mined-out coal unit different from the rock layers tapped into by area wells. Groundwater flow across the intact bedding planes is very slow. Due to this slow movement and the hydraulic sink formed by the discharging water from the Frasier and Landsburg coal seams and mines (which are located between the site and private wells referred to) these wells are outside the zone of influence of north portal wells and flow at Landsburg Mine site.

Many local private wells tap bedrock siltstone, sandstone or small coal units. Groundwater flows more easily and faster along the layering directions in rock than across the rock layers. The layers of sedimentary bedrock are oriented primarily in a north – south direction. It is likely that water from private bedrock wells will be affected from pumping influences from the north or south of their well locations. The pumping wells and the Rogers coal mine are mainly in an east or west direction from private bedrock wells.

Reports of water wells going dry cannot be attributable to Landsburg Mine because there is no infrastructure or any pumping or contingency activities at the site so far. Drying of water wells can be attributed to other extenuating factors, such as area water recharge factors, drought years, and effects from existing public and private groundwater extraction and usage in the area.

Ecology notes that this proposal is designed to protect human health and the environment, and will safeguard the area's groundwater resources preventing contaminated water, if present, from being released and treating and disposing the contaminated water appropriately. Based on the water budget in the area, the proposed pumping rate of 30 gallons per minute is adequate to sequester primarily the water reservoir within Landsburg mine (the contaminated site), and not negatively affect surrounding groundwater. Once remedial actions at the site are completed, it is anticipated that the pumping rate will be much less than 30 gallons per minute possibly as low as 5 gallons per minutes.

The Model Toxics Cleanup Act Regulation is clear about groundwater cleanup actions under its minimum requirements for cleanup actions. It states, "Groundwater containment, including barriers or hydraulic control through groundwater pumping, or both, shall be implemented to the maximum extent practicable to avoid lateral and vertical expansion of the groundwater volume affected by the hazardous substance." Safe, reliable disposal of the pretreated water will not result in a significantly overall threat to human health and the environment than other alternatives that return the water to the site.

For details see WAC 173-340-360(2) (c) (B).

- 5.2 Endangered Species Act - Lack of HPA: Chinook salmon are listed as "threatened" under the federal ESA. Low flows from the shallow aquifer in my area (Landsburg Mine area) are listed as a KNOWN factor of decline for Chinook. Low flows in the Cedar are listed as a potential factor of decline for ESA listed Chinook. I have not heard of any portion of the proposed action addressing ESA issues. The groundwater moving through the trench provides over half of the surface flow for Rock Creek just above the Clark Springs Watershed in spring. This is a time that Coho and Chinook fry are moving through Rock Creek. The actions proposed by WA DOE have not adequately addressed the potential to strand Coho in Rock Creek or Georgetown Creek as a direct result of water removal. Any proposed action that does not address potential impact on Chinook is inadequate. Because of the potential impact on groundwater and listed species I believe that WA DOE may need to get special permits from the federal government for "take" of Chinook. I have not heard**

of seen any indication that WA DOE even considered an HPA to mitigate the impact of the toxic waste or of the proposed remedial actions. King County Department of Transportation found Chinook in the lower reaches of Rock Creek in July, 2004. There is a good likelihood that Chinook and Coho spend many months of the year in Rock Creek, not just during spawning and hatching.

**Correction:** I just realized that in my comment letter yesterday under item #2 I should have used "HCP" (habitat conservation plan) instead of HPA.

***Ecology's Response:***

Ecology is concerned with protecting the environment, particularly habitat for endangered species. Ecology considers the amount of potential groundwater withdrawal in the proposal to be insignificant compared to the potential benefit.

The statement that "Groundwater from the trench (assumed the Rogers Coal Mine) provides over half of the surface flow for Rock Creek" is not correct. The Landsburg Mine site is hydrologically and geographically a small area compared to the Rock Creek watershed and the Cedar River watershed. The principle source of surface flow for Rock Creek is from precipitation and surficial aquifers, not the Landsburg Mine site. Groundwater discharge from Landsburg Mine is not a significant source of surface flow to Rock Creek.

The combined flow of Rock Creek and the Rock Creek alluvial aquifer have been estimated by the City of Kent to vary between 8,000 and 16,000 gallons per minute. The Cedar River itself typically has a flow between 50,000 to well over 500,000 gallons per minute (average flow is over 200,000 gallons per minutes (gpm), not including the amount of groundwater flow in its alluvial aquifer.

Mine total discharge at the south end of the mine is estimated to be about 15 to 20 gallons per minute and at the north end to be another 15 to 20 gallons per minute. Without remedial actions completed for the site, the expected pumping rate if the contingency is triggered is about 30 gallons per minutes, which is similar to the amount of pumping needed to dewater the mine when it was an active coal mine. Once the remedial actions are completed at the site, the expected groundwater-pumping rate could be as low as 5 gallons per minutes.

It is important to note that the amount of groundwater that would be required to capture contamination emanating from the mine would be much less once the remedial actions are completed. Most of the water currently in the mine comes from surface water overland flows entering the mine trenches and direct precipitation in the trenches. Remedial actions are expected to eliminate surface water overland flow from entering the mine trenches and significantly reduce direct precipitation into the trenches by use of a low permeability cap. The remedial actions will thus significantly reduce the amount of groundwater pumping that would be required to capture and contain contaminated groundwater from reaching the environment.



A Habitat Conservation Plan (HCP) is not relevant for the infrastructure proposal. The proposed contingency plan will not negatively impact the Salmonid species, nor require an HCP because this is not a project involving water user activities or excessive water withdrawal. The overriding benefit of the proposed contingency system will be preventing contaminated water from reaching Cedar River and the ecological receptors within it such as salmonid species.

**5.3 Growth Management Act (GMA) and the Toxicity of the Proposed Water to be Removed: The Growth Management Act prohibits the placement of sewers in the rural area in almost all cases with public health needs being one of the accepted reasons. The sewer line that is part of this proposal goes from the treatment facility (located about three miles from the urban growth line), connects to the tight line sewer line at the Tahoma Jr. High School, and then travels to the Metro line at Four Corners. WA DOE says that this line is needed to remove the treated water from the waste site at Landsburg. WA DOE has also told the school district that the water moving through the sewer line on school property should not be a health concern for students because the water will already be treated. If that is the case, why is the treated water required to be removed at all? It would seem to me that if the water quality is not a potential threat to the students (in case of a ruptured line) then it does not meet the threshold of public need as outlined by the state's GMA.**

#### *Ecology's Response:*

The PLPs and Ecology were aware that the pipeline proposal was outside the Urban Growth Boundary, and sought to contact the appropriate agencies to apply for the appropriate permits for this remedial action. Ecology is presently working with the Department of Development and Environmental Services (DDES) for this purpose, and has been informing stakeholders such as the commenter on these issues. Due to the small diameter of the pipeline (4 inches) and its purpose of conveying water as an emergency measure to protect the public and the environment, it is not considered to be a sewer connection. As the commenter has stated, protection of public health is one of the main reasons why this proposal for the effluent line is justified.

Water moving through the proposed pipeline on the school property should not be a health concern. This is because the water moving through the pipe will already be treated. However, it is important that the treated water be removed through the municipal sewer system for secondary treatment. The pre-treatment will reduce concentration of the yet-unknown contaminants to acceptable levels for standard wastewater disposal. This will prevent a short-term release into the environment, should such a malfunction occur at the treatment site, which will be more protective of human health and the environment.

Present technology for the groundwater treatment system does not guarantee reliable, around-the-clock operation for analyzing contaminants and for pre-treating the water. It is possible that there may be a short-term malfunction in the pre-treatment system, and so to prevent any discharge to the environment, the safest and most cost-effective alternative is to connect the treatment system to the sewer district, which allows for secondary and tertiary treatment of the water. This will prevent a short-term release into the environment should such a malfunction occur at the treatment site.

To date, groundwater emanating from the site has shown no contamination or toxicity. Pretreatment will be expected to reduce concentration of the yet-unknown contaminants to acceptable levels for standard wastewater disposal.

- 5.4 Proposed sewer line is on the rural side of 4:1 open space lands. King County's GMA policies prohibit sewer lines on the rural side of open space lands created through the 4:1 permit process. The Landsburg Mine is immediately adjacent to 4:1 open space lands. The 4:1 program allows urban density development in the rural area as long as four acres of protected open space are created for every one acre developed at urban densities. I know that the PLP's have offered a letter stating that the line being placed will not ever be used for development. I am unimpressed as the letter is not binding unless someone wanted to take the companies to court. Anything less than a notice on title that the 300 acres around the Landsburg mine had 100% of all the development credits permanently removed is not adequate. King County has a transfer of density program of which the 300 acres around the Landsburg Mine can qualify as a sending site. Removal of the density credits from the land around the mine can generate revenue for the landowner. And, by removing all the density credits from the land around the mine the PLP's are showing that they are serious about guaranteeing that any waste water line placed in that area will never be used for homes - even if the line is upgraded. I know that at least two of the PLPs have participated in the density credit program so this should be nothing new to them.**

***Ecology's Response:***

The comment refers to a sewer line, but the proposed pipeline is not a sewer line, it is a dedicated pipeline for the discharge of treated groundwater. The Model Toxics Control Act does not give Ecology general broad authority to determine how a site may be used in the future, including transactions involving development credits. Instead, Ecology's authority is limited to protecting human health and the environment as implemented by MTCA. Ecology does not have the authority to participate in such transactions.

- 5.5 Don't Put the Line through our Public Park. The land immediately to the west of the Landsburg Mine is public park/open space created through the 4:1 program. If a pipeline is ever placed it must go along the road (the shortest route!) and not through the public park. If the line were to ever rupture there could be the risk of contamination of a public park if the line went through the park. If the line goes along the road there is less risk to park users and easier to reach in case of an emergency. In addition, the easement through the public park owned by Palmer Coking Coal does up a steep hill and then back down. This road has had erosion failures already in its short history. Taking the line along steep slopes increase the chance of failure and potentially a longer time period before any failure is noticed.**

***Ecology's Response:***

The proposed pipeline route was originally designated as open land with utility easements to Palmer Coke and Coal (one of the PLPs). This area is not a designated park, but is

designated open land that can also be used by the public. Ecology communicated this concern with the PLPs and they will consider this alternative pipeline route.

Ecology is concerned about public safety. The infrastructure system design will include monitoring requirements that identify a disruption in flow caused by a pipeline break for rapid shut-off of flow and repairs. The extracted groundwater will be pre-treated prior to discharge. This effluent discharge will not have high levels of contamination and will meet the sanitary discharge limitations for Publically Owned Treatment Works or POTWs. A short-term release underground is not expected to present a risk to site visitors. If a break did occur, the release to the environment would be evaluated during repairs of the pipeline. We will implement corrective actions, if needed.

**5.6 Increased Sewer Line Replacement Costs for School District. The Tahoma School District owns two parcels near Landsburg Mine. One of these parcels is the location of the Tahoma Jr. High School. The second property is held in reserve for future growth. The school district has already paid for the sewer line that extends to the school. This sewer line was always intended to be a tight line that would serve only the two schools. If the PLP's hook up to this line they will pay the school district back for part of the expense of putting in the sewer line. However, in the long run it will cost the school district more if they have to then put another line in because their extra capacity was used by the PLP's. I doubt that the cost per linear foot will be as low as it was when the line first went in so the school district (and all of the taxpayers) will end up paying more so that the PLPs could hook up to an existing line at a reduced cost. If the PLPs do get permission to put in a waste water line I believe that they should have to put in a line all the way to Four Corners and NOT use the tight line paid for by the school district. This is the only way to ensure that the school district does not end up paying for part of the PLP's remediation.**

***Ecology's Response:***

Ecology and the PLPs were aware of the connection issues in the proposal and have been investigating issues of capacity and potential compensation. The PLPs, with Ecology review, will seek to clarify the actual existing and planned capacity for their sewer line to evaluate the feasibility of connection, both technically and economically.

**5.7 Critical Area Designation. The County's Permitting Process Requires a Critical Area Designation Prior to Clearing and Grading Permits. The soil types near the proposed treatment plant are soils indicating a forested wetland. It is not unusual for the soils along the trails in that area to be damp in July. Since altered hydrology is already a concern in the area I feel that an appropriate action to take would be to conduct a critical area designation prior to making a decision about the location of the treatment plant. The proposed area has steep slopes, likely erosion hazard, coal mine hazard, potential wild life corridor, and wetlands. There may be enough environmental challenges to building in that location that the treatment plant may need to be placed on the southern portion of the trench, making the current proposal to run the waste water line along Summit Landsburg a wasted effort.**

### ***Ecology's Response:***

The Landsburg Mine site is a designated contaminated site under state law or statutory authority. Ecology and the PLPs will adhere to county requirements relevant to permitting process for this interim remedial action. However, the department is exempt from the procedural requirements of certain laws, including “any laws requiring or authorizing local government permits or approvals for remedial actions.” Although there is exemption from procedural requirements from such permits, the state and the PLPs will incorporate the substantive requirements of the permits as identified by state agencies or local government.

So far, an infrastructure pad at the north portal is the most viable option due to less environmental impact (fewer incursions into wetlands or protected areas, less utility and property access issues). The area to the north is also the more likely area of impact due to the location of waste disposal, groundwater flow and water table inclination to the north portal. The location and topography of the proposed infrastructure has none of the hazards or features (erosion, coal mine, wildlife corridor, wetlands) in the comment.

Refer to the following: Chapter 70.105D RCW and WAC 173-340-710 (9) (b)

## **Comment 6: Ed Woodruff (Ravensdale, Washington)**

### *Key Concerns: Proposal to Cleanup the Site*

- 6.1 I AM WRIGHTING CONCERNING THE EVENTUAL SOLUTION TO THE LANDSBURG MINE SITE CLEANUP. SINCE IT EFFECTS A PORTION OF MY PROPERTY AND IS CONTINUEING TO CAVE IN, I FEEL I SHOULD HAVE SOME LITTLE BIT OF PRIORITY IN MY OPINIONS AND CONCERNS.**

**YOU HAVE DRILLED AND TESTED WATER IN DEEP WELLS AROUND MY HOUSE, BUILT A FENCE AROUND THE CAVE IN AND HELD PLENTY OF FEEL-GOOD TALK SESSIONS ABOUT THE PROBLEM THAT, IN MY OPINION, ONLY HAS ONE PRACTICAL SOLUTION. WHILE I DON'T SEE WHAT GOOD A DEEP WELL PUMPING SYSTEM THAT WOULD DISCHARGE INTO A SEWER COULD DO, SINCE IT IS JUST MOVING A BUNCH OF MUCK THAT IS ENTRAPPED IN A LOCATION WHERE IT CAN DO NO HARM, I WOULD NOT BE AGAINST SUCH A PROJECT. I DO, HOWEVER, BELIEVE IT WOULD BE MORE SENSABLE TO SIMPLY LEAVE IT WHERE IT IS. ENTOMBING SLUDGE IN COAL (CHARCOAL) IS REALLY QUITE AN ADEQUATE SOLUTION.**

### *Ecology's Response:*

Ecology believes that this proposal is necessary because it is possible that contaminated groundwater can get out of the mine in the future if there has been a rupture in the buried drums or if some event such as an earthquake causes the drums to shift and/or burst. At this point, groundwater emanating from this site does not contain contamination resulting from the wastes in the trench. Nevertheless, it will be important to have a plan in place, so that if we find contaminated groundwater emanating from the site it would be prevented from moving away from the site and not be delayed by the process of obtaining time-consuming permits. This proposal would prevent any delays in containing and disposing of the water after it has been pre-treated by already having the groundwork in place for setting up treatment equipment and disposal of the groundwater.

- 6.2 UNTAMITLY, AFTER ALL THE TALKING IS DONE, THE HOLE WILL HAVE TO BE FILLED. WHAT I PROPOSE IS RECOVERING ALL THE MINE TAILINGS (PILES OF DIRT) THAT CAME OUT OF THE MINE IN THE FIRST PLACE AND RECYCLING IT BACK TO THE TOP AND DUMPING IT IN THE HOLE IN SUCH A WAY THAT IT WOULD BE BERMED UP. THIS WOULD CAUSE THE RAIN TO RUN OFF TO THE SIDES AND NOT RUN DOWN INTO THE MINE VOIDS. THERE ARE PLENTY OF PILES OF MINE TAILINGS IN THE AREA THAT COULD CONTRIBUTE TO THIS EFFORT. SINCE I HAVE PLENTY OF EXPERIENCE WITH HEAVY EQUIPMENT AND EARTH MOVING,**

**HAVING OWNED AN EXCAVATION BUSINESS FOR YEARS, AND SINCE ONE OF THE THREE ACCESSSES INTO THE PROPERTY IS THROUGH MY PROPERTY, I PROPOSE THAT YOU LET ME DO THE JOB.**

***Ecology's Response:***

The described activities are similar to the soil capping cleanup alternative in the draft Cleanup Action Plan, which must still be finalized in the future. If this preferred alternative is finalized, the PLPs will be responsible in implementing the plan, including remedial construction work. Once the Cleanup Action Plan is available for public review and comment, this comment will become more relevant.

- 6.3 I PROPOSE TO SUPPLY MEN AND EQUIPMENT TO RECLAIM FILL MATERIAL FROM THE PORTALS OF MINES IN THE RAVENSDALE AREA AND TRUCK IT TO THE TOP OF THE MINE CAVE IN AND FILL THE HOLE UP TO IT'S ORIGINAL GRADE. AFTER IT IS FILLED AND MOUNDED FOR DRAINAGE, I PROPOSE TO GET CLAY FROM A LOCAL CLAY MINE AND CAP THE BERM WITH A WATER FAST CAP. IF YOU WANT TO DRILL DOWN INTO THE VOIDS AND DYNAMITE THEM TO FURTHER PREVENT ANY VOIDS, I CAN DO THAT ALSO.**

***Ecology's Response:***

Please see response to 6.2 above. Further disturbance in the former mine may serve to trigger release of hazardous substances or cause it to spread. Therefore, the present plan to cap portions of the trench where the wastes are located and to monitor the outputs where groundwater is coming out of the former mine is preferable compared to activities that are more intrusive.

- 6.4 SINCE I HAVE A LARGE SHOP AND EQUIPMENT STOREAGE SPACE RIGHT ON THE PROPERTY, I AM STRATEGICALLY POSITIONED BOTH PHICALLY AND EXPERIENCE WISE TO DO THE JOB AND PROVIDE SECURITY DURING AND AFTER THE JOB IS DONE. I WOULD WELCOME A VISIT FROM ANY OF YOU FOLKS WHO WANT TO GET PRACTICLE ABOUT A SOLUTION TO THIS LONG TIME PROBLEM.**

***Ecology's Response:***

The Department of Ecology appreciates your interest in the cleanup of this site. We will keep you updated of events as they proceed.

## **Comment 7: Scott Freed (Ravensdale, Washington)**

*Key Concerns: Cleanup Solution, Water Resources*

- 7.1 I am in your circle of Danger. You need to address two things, One you do us a good job cleanup. The other you need to get water to every one that is in your circle.**

### ***Ecology's Response:***

Ecology appreciates your interest in the site and participation in the public meeting. We will provide a cleanup solution that will be protective of human health and the environment under the mandate provided by the Model Toxics Control Act.

This cleanup is being managed by Ecology's Toxic Cleanup Program, which does not have authority to provide publicly supplied water. However, there is no indication that alternate water supplies will need to be provided because groundwater monitoring results have not shown contamination resulting from the wastes disposed of in the trench.

Recent examination shows that the Freed property it is not located in direct hydraulic pathways of the site, therefore, Landsburg Mine site poses little risk of contaminating the groundwater on this property. The property address of the Freed property is located approximately 3,500 feet east of the Landsburg Mine site. This is across regional rock bedding, in a direction up gradient to regional groundwater flow direction to the site. The intervening Landsburg coal seam is between the well location and the Landsburg mine site. Therefore, the well is not located in direct hydraulic pathways from the site and as such, Landsburg Mine site poses little risk if any to this address.